

### **REMARKS**

Claims 1-22 are pending in this application. Claims 1-6, 8-16, 18, and 19 are deemed to be allowable. Claim 18 is canceled by this amendment.

### **REJECTIONS UNDER § 112**

#### **Claims 9-11**

Claims 9-11 were rejected as being non-compliant with the written description requirement of § 112, first paragraph. Applicants respectfully request reconsideration.

Without conceding to the propriety of the rejection and in order to expedite prosecution of this application, claim 9 is amended to recite that the second layer of bucky paper covers at least a portion of the medical implant.

Applicants respectfully disagree that claim 9 should refer to an “implant system” rather than a “medical implant.” Claim 1, from which claim 9 depends, refers to a “medical implant,” which serves as the antecedent basis for the “medical implant” recited in claim 9.

Accordingly, Applicants respectfully submit that claims 9-11 are in compliance with the written description requirement of § 112, first paragraph, and request that the rejection be withdrawn.

#### **Claims 20-22**

Claims 20-22 were rejected as being non-compliant with the enablement requirement of § 112, first paragraph. Applicants respectfully request reconsideration.

As stated in MPEP § 2164.01, the test for enablement is whether the disclosure “contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention.”

As an initial matter, Applicants respectfully disagree with the Office Action’s assertion that a “review of the specification did not find support for the use of bucky paper alone as an implant.” Applicants respectfully note that the specification does indeed describe the use of bucky paper alone as an implant. For example, at ¶¶ [0031]–[0033], the specification explains:

[0031] FIG. 4 provides alternative embodiments of the present invention. As can be seen (and as mentioned above), bucky paper 42 has been formed in the shape of a cylinder 41 and the shape of a pouch 47. Accordingly, in alternative embodiments, the bucky paper 42 may be shaped in non-planar configurations. This may be done to adapt and contour the bucky paper to the target site, where the bucky paper will be positioned, as well as for other reasons. For instance, if the bucky paper 42 is formed in the shape of a sack or pouch 47, the pouch 47 may be used to surround a targeted pouch like area such as artificial bones or the heart.

[0032] The bucky paper may be used in conjunction with other materials, such as silicone rubber. For instance, the silicone rubber may be sandwiched between two layers of bucky paper to form a pouch, a cylinder, or other desired shape. If the bucky paper 42 is formed in the shape of a cylinder 41, it may be implanted in a cylindrical lumen.

[0033] In these embodiments, therapeutic may be delivered to the target site directly upon the placement of the bucky paper 42, over time, through time-release from the bucky paper 42, and by using the bucky paper 42 as a lure to alternatively delivered therapeutic. When used as a lure, the bucky paper 42 may be treated before hand by placing magnetized threads in the paper that may then be used to attract para-magnetic or ferromagnetic microparticles containing or otherwise associated with therapeutic.

The specification thus teaches how to make and use the bucky paper alone as an implant. The specification provides an explanation of how the bucky paper (alone) can be shaped into a cylinder or pouch (see FIG. 4, for example), which could be used to surround artificial bones or the heart. The specification also explains how the bucky paper could be used with other materials, and gives an example where silicone rubber is sandwiched between two layers of bucky paper. The specification also explains how the bucky paper can be used to deliver a therapeutic (by time-release or as a lure, for example). Thus, the specification contains sufficient information to enable a person of ordinary skill in the art to make and use the medical implants of claims 20-22.

Accordingly, Applicants respectfully submit that claims 20-22 are in compliance with the enablement requirement of § 112, first paragraph, and request that the rejection be withdrawn.

Claims 7 and 17

Claims 7 and 17 were rejected as being non-compliant with the definiteness requirement of § 112, second paragraph. Applicants respectfully request reconsideration.

Without conceding to the propriety of this rejection and in order to expedite prosecution of this application, claim 7 is amended to provide an antecedent basis for “the polymer layer,” and claim 17 is amended to expressly recite the therapeutic as a claim element.

Applicants respectfully disagree with the Office Action’s assertion that claim 1 would exclude the possibility of a polymer or other layer existing between the first layer of bucky paper and the exterior surface of the medical implant. By “covering at least a portion of the exterior surface,” the layer of bucky paper is disposed over, but not necessarily directly adjacent, the exterior surface of the medical implant. For example, FIG. 7 shows bucky paper 72 positioned over an implant 71, with therapeutic coating 74 being positioned between bucky paper 72 and implant 71. Here, bucky paper 72 covers, but is not directly adjacent, the exterior surface of implant 71.

Accordingly, Applicants respectfully submit that claims 7 and 17 are in compliance with the definiteness requirement of § 112, second paragraph, and request that the rejection be withdrawn.

**CONCLUSION**

Applicants respectfully submit that the present application is in condition for allowance. The Examiner is invited to contact Applicants' representative to discuss any issue that would expedite allowance of this application.

The Commissioner is authorized to charge all required fees, fees under § 1.17, or all required extension of time fees, or to credit any overpayment to Deposit Account No. 11-0600 (Kenyon & Kenyon LLP).

Respectfully submitted,

/Steven S. Yu/

\_\_\_\_\_  
Steven S. Yu (Reg. No. 58,776)

Date: 4 April 2008

KENYON & KENYON LLP  
1500 K Street, N.W., Suite 700  
Washington, DC 20005  
Tel: (202) 220-4200  
Fax: (202) 220-4201